

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401-7906**

**MONITORING AND REPORTING PROGRAM REQUIREMENTS  
ORDER NO. R3-2008-0069**

**(Waste Discharger Identification No. 3 350100001)**

**FOR  
THE CITY OF HOLLISTER  
DOMESTIC WATER RECYCLING FACILITY  
SAN BENITO COUNTY**

This Monitoring and Reporting Program Requirements (MRP) is issued by the Regional Water Quality Control Board, Central Coast Region (Water Board) pursuant to California Water Code section 13267 and is incorporated into Master Reclamation Requirements Order No. R3-2008-0069. The City of Hollister is subject to the MRP because it discharges recycled water. This MRP is necessary to assure that the discharge of recycled water complies with the requirements of the Master Reclamation Requirements and are protective of public health and the environment.

**SUPPLIER REQUIREMENTS**

**A. WATER SUPPLY MONITORING**

1. Representative samples of water supplies impacting the City's wastewater treatment facilities shall be collected and analyzed for the constituents and at the frequency specified below:

<b>Parameter/Constituent<sup>a,b,c</sup></b>	<b>Units</b>	<b>Sample Type</b>	<b>Minimum Sampling and Analyzing Frequency</b>
General Minerals <sup>d</sup>	mg/l	Grab	Annually (September)

Notes:

- a) Sampling results for the California Department of Public Health (DPH) may be submitted to satisfy these requirements.
- b) Data shall be reported as individual concentrations for each water supply well sampled and calculated as flow weighted averages to represent as delivered water supply quality.
- c) Sampling for specific analytes may be reduced or discontinued upon Discharger request and Executive Officer approval for parameters/constituents for which additional data provides no benefit.
- d) General Mineral analysis shall include the following constituents: Calcium, Magnesium, Sodium, Sulfate, Carbonate, Bi-Carbonate, Chloride, Total Hardness, Total Alkalinity, Total Dissolved Solids, pH, Electrical Conductivity, Boron, Iron, and Nitrate (as N).

**B. INFLUENT MONITORING**

1. Representative samples of the treatment facility influent shall be collected and analyzed for the constituents/parameters and at the frequencies specified in the following table:

Constituent/Parameter <sup>a</sup>	Units	Sample Type <sup>b</sup>	Sampling Frequency <sup>c</sup>
Flow Volume	MGD	Metered	Daily
Maximum Daily Flow	MGD	Metered	Daily
Average Daily Flow	GPD	Calculated	30-day Running Average
pH	Units	Grab	Weekly
BOD <sub>5</sub>	mg/L	24-hour composite	Weekly
Settleable Solids	mg/l	24-hour composite	Weekly
Total Suspended Solids	mg/L	24-hour composite	Weekly
Total Nitrogen (as N)	mg/L	Grab	Monthly
Nitrate (as Nitrogen)	mg/l	Grab	Monthly
Ammonia (as N)	mg/L	Grab	Monthly
Sulfate	mg/L	Grab	Quarterly
Boron	mg/L	Grab	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly
Sodium	mg/L	Grab	Quarterly
Chloride	mg/L	Grab	Quarterly
Perchlorate	mg/L	Grab	Quarterly
Total Trihalomethanes <sup>d</sup>	mg/L	Grab	Quarterly
Total Trihaloacetic Acid <sup>e</sup>	mg/L	Grab	Quarterly

**Notes:**

- Sampling for specific analytes may be reduced or discontinued after one year upon Discharger request and Executive Officer approval for parameters/constituents for which additional data provides no benefit.
- Composite samples shall be flow weighted. 24-hour composite samples shall be collected on a Monday through Sunday rotating schedule and subsequent monthly sampling events shall be separated by at least 16 days and no greater than 30 days.
- Quarterly monitoring shall be conducted in January, April, July, and October.
- Includes the following: chloroform, bromodichloromethane, dibromochloromethane, and bromoform.
- Includes the following: monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid.

**C. EFFLUENT MONITORING**

- Representative samples of treatment facility effluent shall be collected<sup>a</sup> and analyzed for the constituents/parameters and at the frequency specified below for each treatment facility:

Constituent/Parameter <sup>b</sup>	Units	Sample Type <sup>c</sup>	Sampling Frequency
Min Daily Flow	gal/day	Metered	Continuous
Max Daily Flow	gal/day	Metered	Continuous
Average Daily Flow	gal/day	Calculated	Daily
Turbidity	NTU	Metered	Continuous
Total Chlorine Residual <sup>d</sup>	mg/L	Metered	Continuous
Total Coliform	MPN/100 ml	Grab	Daily
BOD <sub>5</sub>	mg/L	24-hour composite <sup>c</sup>	Weekly <sup>e</sup>
Total Suspended Solids	mg/L	24-hour composite <sup>c</sup>	Weekly <sup>e</sup>
pH	Units	Grab	Weekly <sup>e</sup>
Ammonia (as N)	mg/L	Grab	Weekly <sup>e</sup>
Nitrate (as N)	mg/L	Grab	Weekly <sup>e</sup>
Total Dissolved Solids	mg/L	Grab	Monthly <sup>f</sup>

Constituent/Parameter <sup>b</sup>	Units	Sample Type <sup>c</sup>	Sampling Frequency
Sodium	mg/L	Grab	Monthly <sup>f</sup>
Chloride	mg/L	Grab	Monthly <sup>f</sup>
Sulfate	mg/L	Grab	Monthly <sup>f</sup>
Boron	mg/L	Grab	Monthly <sup>f</sup>
Total Nitrogen (as N)	mg/L	Grab	Quarterly <sup>g</sup>
Nitrite (as Nitrogen)	mg/l	Grab	Quarterly <sup>g</sup>
Total Kjeldahl Nitrogen (as N)	mg/l	Grab	Quarterly <sup>g</sup>
Aluminum	mg/l	Grab	Annually <sup>h</sup>
Antimony	mg/l	Grab	Annually <sup>h</sup>
Arsenic	mg/l	Grab	Annually <sup>h</sup>
Barium	mg/l	Grab	Annually <sup>h</sup>
Beryllium	mg/l	Grab	Annually <sup>h</sup>
Cadmium	mg/l	Grab	Annually <sup>h</sup>
Chromium	mg/l	Grab	Annually <sup>h</sup>
Copper	mg/l	Grab	Annually <sup>h</sup>
Cyanide	mg/l	Grab	Annually <sup>h</sup>
Flouride	mg/l	Grab	Annually <sup>h</sup>
Lead	mg/l	Grab	Annually <sup>h</sup>
Mercury	mg/l	Grab	Annually <sup>h</sup>
Nickel	mg/l	Grab	Annually <sup>h</sup>
Selenium	mg/l	Grab	Annually <sup>h</sup>
Thallium	mg/l	Grab	Annually <sup>h</sup>
Zinc	mg/l	Grab	Annually <sup>h</sup>
VOCs <sup>j</sup>	mg/l	Grab	Once/5 Years <sup>i</sup>
PCBs <sup>k</sup>	mg/l	Grab	Once/5 Years <sup>i</sup>
Pesticides <sup>l</sup>	mg/l	Grab	Once/5 Years <sup>i</sup>

## Notes:

- Sampling shall occur immediately following the final treatment process (i.e. disinfection or dechlorination as applicable) unless noted otherwise
- Sampling for specific analytes may be reduced or discontinued after one year upon Discharger request and Executive Officer approval for parameters/constituents for which additional data provides no benefit.
- Composite samples shall be flow weighted. 24-hour composite samples shall be collected on a Monday through Sunday rotating schedule.
- Shall be compared to the chlorine residual required to achieve a minimum CT value of 450 milligram-minutes per liter.
- Weekly samples shall be collected on a Monday through Sunday rotating schedule.
- Monthly sampling events shall be separated by at least 16 days and no greater than 30 days.
- Quarterly monitoring shall be conducted in January, April, July, and October
- Annual monitoring shall be conducted in July
- Once/5 Years monitoring shall commence in July 2009
- U.S. EPA Method 8260B
- U.S. EPA Method 8082
- U.S. EPA Method 8081

**D. WASTE DISPOSAL AND STORAGE FACILITY MONITORING**

Recycled water disposal and storage reservoirs shall be inspected daily. Weekly visual inspections will be allowable for water disposal and storage reservoirs fitted with reliable electronic remote depth gauging systems. Notes shall be kept of observations and shall be summarized in annual monitoring reports. In the event of impending freeboard violation,

storage pond overflow, or backflow into the treatment plant, the Distributor (and Users as appropriate), Executive Officer, and the DPH shall be notified immediately.

Representative sampling measurements shall be taken in each waste disposal and storage reservoir for the parameters/constituents and at the frequency specified below:

Parameter/Constituent <sup>a,b</sup>	Units	Sample Type <sup>a</sup>	Minimum Sampling and Analyzing Frequency
pH	-	Grab	Weekly
Dissolved Oxygen (DO)	mg/l	Grab	Weekly
Sludge Depth <sup>b</sup>	feet	Measured	Once/3 years (September 2009, 2012,...)

Notes:

- a) Grab sample for pH and DO shall be collected at one-foot depth from at least three representative locations within each treatment and disposal pond.
- b) Sludge depth shall be measured within the sludge stabilization basin. A sufficient number of measurements shall be taken to provide representative estimates of sludge volumes within the basin.

## E. SOLIDS/BIOSOLIDS MONITORING

1. The following information shall be submitted with the Annual Report required by Standard Provision C.16:
  - a. Annual biosolids removed in dry tons and percent solids.
  - b. If appropriate, a narrative description of biosolids dewatering and other treatment processes, including process parameters. For example, if drying beds are used, report depth of application and drying time. If composting is used, report the temperature achieved and duration.
  - c. A description of disposal methods, including the following information as applicable related to the disposal methods used at the facility. If more than one method is used, include the percentage and tonnage of annual biosolids production disposed by each method.
    - i. For landfill disposal include: 1) the Water Board WDR numbers that regulate the landfills used, 2) the present classifications of the landfills used, and 3) the names and locations of the facilities receiving biosolids.
    - ii. For land application include: 1) the location of the site(s), 2) the Water Board's WDR numbers that regulate the site(s), 3) the application rate in lbs/acre/year (specify wet or dry), and 4) subsequent uses of the land.
    - iii. For offsite application by a licensed hauler and composter include: 1) the name, address and USEPA license number of the hauler and composter.
  - d. Copies of analytical data required by other agencies (i.e. USEPA or County Health Department) and licensed disposal facilities (i.e. landfill, land application, or composting facility) for the previous year.

**F. EQUIPMENT CALIBRATION**

1. Calibration records of flow meters and other process instrumentation performed in accordance with manufactures' recommendations and best management practices for the industry will be kept on site and made available to Water Board and DPH staff upon request.

**DISTRIBUTOR REQUIREMENTS****G. RECYCLED WATER USE AREA MONITORING**

1. The quantity of reclaimed water distributed to each reuse site shall be recorded on a weekly basis. Total flows shall be metered or estimated based on irrigation run times and distribution system design flow rates. Total as applied flows shall be compared to Supplier effluent flow rates.
2. During periods of recycled water application the Distributor or Users, as applicable, shall inspect the irrigation use areas no less frequently than weekly to verify and document compliance with Order No R3-2008-0069. The visual inspections shall be noted in a bound inspection logbook(s) and at a minimum shall document proper sprinkler operation, runoff, erosion, saturated surface conditions, and odors. The logbook(s) shall be made available to the Water Board and DPH upon request. A summary of observations made during water recycling area inspections and a brief discussion of any corrective actions taken or planned shall be included with each annual monitoring report.
3. The Distributor and Users shall coordinate with the DPH to ensure and document that backflow devices are present, tested annually by a certified individual, and repaired or replaced if found defective.
4. The Distributor shall inspect and document the operation of the reuse site irrigation systems at least quarterly to verify that the Users are operating the reuse sites in compliance with the uniform statewide reclamation criteria established pursuant to California Water Code Section 13521 and Order No. R3-2008-0069.
5. The Distributor in coordination with the Users, water purveyor, and DPH shall perform and document a cross-connection test by an appropriately certified individual on an annual basis at each reuse site where both recycled water and potable water piping systems are utilized for irrigation or are otherwise present in proximity to each other.<sup>1</sup>
6. Each individual User Reclaimed Water Site Supervisor shall provide quarterly updates to the Distributor regarding irrigation frequency and flow rates, proposed system modifications, system peculiarities, and to verify employee training. The Distributor shall keep a record of all system modifications and document that all work is conducted in accordance with the Cross Connection Control Plan and applicable regulations.
7. The Distributor shall compile and conduct quarterly reviews of the applied recycled water flows to identify unusual usage behavior or significant changes. The Distributor shall conduct and document follow-up investigations if patterns change dramatically.

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<sup>1</sup> Cross-connection tests will not be required for portions of the distribution system or reuse site areas for which no distribution system or potable water system maintenance, modifications, or additions have occurred since the last cross-connection test. The Distributor shall provide a certified statement as such for portions of the distribution system or reuse sites not tested for potential cross-connection.

## H. GROUNDWATER MONITORING

1. Representative samples of groundwater shall be collected from shallow wells<sup>2</sup> upgradient and downgradient of disposal areas. To ascertain compliance with Master Reclamation Requirements Order No. R3-2008-0069 in establishing new, or verifying existing upgradient and downgradient monitoring wells, the monitoring network shall be supported by sufficient, as determined by the Executive Officer, geologic and hydrogeologic documentation. Samples of groundwater shall be collected and analyzed for the constituents and at the frequencies specified in the following table:

Constituent/Parameter <sup>a</sup>	Units	Sample Type	Sampling Frequency <sup>c</sup>
Depth to Water	Ft.-BGS and Ft.-Above MSL <sup>b</sup>	Measured	Quarterly
Total Nitrogen (as N)	mg/L	Grab	Quarterly
Total Kjeldahl Nitrogen (as N)	mg/L	Grab	Quarterly
Nitrate (as N)	mg/L	Grab	Quarterly
Nitrite (as N)	mg/L	Grab	Quarterly
pH	Standard Units	Grab	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly
Sodium	mg/L	Grab	Quarterly
Chloride	mg/L	Grab	Quarterly
Sulfate	mg/L	Grab	Quarterly
Boron	mg/L	Grab	Quarterly
Perchlorate	mg/L	Grab	Quarterly
Total Trihalomethanes <sup>d</sup>	mg/L	Grab	Quarterly
Total Trihaloacetic Acid <sup>e</sup>	mg/L	Grab	Quarterly

Notes:

- a) Sampling for specific analytes or from specific monitoring wells may be reduced or discontinued after one year upon Discharger request and Executive Officer approval for parameters/constituents for which additional data provides no benefit.
- b) Ft.-BGS = Feet Below Grade Surface, Ft.-Above MSL = Feet Above Mean Sea Level
- c) Quarterly monitoring shall be conducted in January, April, July, and October
- d) Includes the following: chloroform, bromodichloromethane, dibromochloromethane, and bromoform.
- e) Includes the following: monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid.

The Executive Officer may request geologic and hydrogeologic documentation to ascertain whether the existing monitoring well network is sufficient to verify compliance with Master Reclamation Requirements and whether additional monitoring wells are required based on review of available groundwater data.

<sup>2</sup> Provide well construction details for each monitoring well indicating total well depth and screen interval in depth below ground surface and elevations referenced to MSL along with the top of well casing elevation.

## I. REPORTING

1. The Supplier and Distributor shall submit **Quarterly** self monitoring reports summarizing reclaimed water supplied and used at each reuse site. The quarterly self monitoring reports shall include:
  - a. Monitoring data results for the reporting period as required by Sections A, B, C, D, E, F, G, and H of this MRP.
  - b. A list of the reuse sites with the name, location and brief description of each reuse site.
  - c. The total amount of reclaimed water supplied to each reuse site, and
  - d. The name of the hydrologic areas underlying each reuse site [Required pursuant to California Water Code Section 13523.1(b)(5)].

The Quarterly monitoring reports shall be submitted as follows:

Monitoring Period	Report Due Date
January 1 – March 31	April 30 <sup>th</sup>
April 1 – June 30	July 31 <sup>st</sup>
July 1 – September 30	October 31 <sup>st</sup>
October 1 – December 31	January 31 <sup>st</sup>

2. The Supplier and Distributor shall submit **Annual** self monitoring reports by January 31<sup>st</sup> of each year summarizing reclaimed water use, including the total volume of reclaimed water supplied, and the total number of reclaimed use sites and their locations. Reports shall include records of the Distributor's or User's reuse site inspections and results of the annual cross-connection tests. Annual self monitoring reports shall contain at a minimum:
  - a. Documentation of the use area and groundwater monitoring requirements listed above.
  - b. A list of Users accompanied by a scaled map showing the recycled water use areas.
  - c. A table summarizing monthly recycled water application rates in acre-feet and gallons for each recycled water use.
  - d. The Nutrient Management Plan report as specified in Distributor/User Requirements.
  - e. The Long Term Salinity Management Program report as specified in Distributor/User Requirements.
  - f. The Groundwater Monitoring Plan report as specified in Distributor/User Requirements, and
  - g. An up-to-date copy of the Rules and Regulations for Recycled Water Users and a standard copy of the Recycled Water Use Permit issued to the Users as specified in Individual Recycled Water Use Permits.
3. The annual monitoring reports shall contain all data collected or calculated over the previous annual monitoring period. All monitoring data shall be tabulated in a logical and coherent format and be accompanied by copies of laboratory analytical data sheets as applicable. The data shall be summarized in a manner that clearly illustrates compliance with the Order. The User list, use area map, and recycled water application summary table shall be cross-referenced for easy evaluation.
4. The Distributor shall report any adverse conditions or non-compliance with Order No. R3-2008-0069 potentially endangering public health or the environment to the:
  - a. Water Board (805/549-3147),
  - b. California Department of Public Health (831/655-6939),

- c. San Benito County Environmental Health (831/636-4035), and,
- d. any other agencies as appropriate.

Notice will occur within 24-hours of knowing of such conditions. A summary record of all adverse conditions or non-compliance along with corrective actions taken shall be included in each annual monitoring report.

Depending on the severity of the adverse condition or non-compliance being reported, a written report may also be required by the Water Board. The written report shall be required within five days of the initial informal reporting date and shall contain (1) a description of the non-compliance and its cause; (2) the period of non-compliance, including dates and times, and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and (3) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance.

## **SUPPLIER AND DISTRIBUTOR REQUIREMENTS**

### **J. PROVISIONS**

1. All quarterly monitoring shall be performed in January, April, July, and October during the monitoring quarter (calendar quarter). Monthly sampling shall be conducted at regularly scheduled times during each month and consecutive events should be approximately four weeks apart and no less than two weeks apart. Unless otherwise specified by the Monitoring and Reporting Program, annual sampling shall be performed any time during the calendar year, but samples representative of two consecutive annual periods must be obtained at least six months apart.
2. All monitoring must be conducted according to test procedures established by 40 Code of Federal Regulations Part 136, entitled, "Guidelines Establishing Test Procedures for Analysis of Pollutants." All sampling analyses shall be conducted at the lowest practical quantitation limits achievable under U.S. EPA specified methodology. Constituents not detected at the analytical method detection limit will be considered in compliance with effluent limitations in cases where effluent limits are set below the analytical method detection limit.
3. All samples collected shall be tracked and submitted under chain of custody and analyzed by a laboratory certified by DPH for the specified analysis.
4. This Monitoring and Reporting Program may be revised at any time during the Permit term, as necessary, under the authority of the Executive Officer.
5. The Supplier and Distributor shall submit monitoring data and the monitoring reports electronically. The documents shall be in a searchable PDF format (less than 10 MG in size) and emailed to [centralcoast@waterboards.ca.gov](mailto:centralcoast@waterboards.ca.gov). PDF documents that exceed 10MB should be transferred to a disk and mailed to the Water Board at:

California Regional Water Quality Control Board  
Central Coast Region  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401



**K. IMPLEMENTATION**

1. This monitoring and reporting program shall be implemented December 5, 2008.
2. The Executive Officer may revise this MRP as appropriate.

Ordered By:

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Executive Officer

CRD

126-01

Paper File: City of Hollister

Electronic File: S:\WDR\WDR Facilities\San Benito Co\City of Hollister\MRR R3-2008-0069\Draft Order\MRP R3-2008-0069.doc